

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in this application.

1. (Currently Amended) An LED operation light, comprising:  
at least two power sources (PW), at least one which is an adjustable power source (ADJ-PW), and  
at least two LED component units (LG) for emitting light in response to power received from a power source (PW), which LED component units (LG) comprise at least one LED component (LED) and which LED components (LED) have been arranged to produce color components of light emission of the said LED operation light at two different wavelengths at least,  
~~characterized in that~~  
the wherein said LED operation light additionally comprises:  
at least one measuring means (MM) for measuring the color temperature of the light emission produced by the said LED component units (LG), possibly reflected from some surface, or of at least one such magnitude generated by the LED component units (LG) that has a known correlation to the color temperature of the light emission produced by the said LED component units (LG), and  
at least one control means (CM) for generating control information for at least one of the said adjustable power sources (ADJ-PW) in response to measurement data received from the said measuring means (MM) to control production of at least one color component in at least one LED component (LED).
2. (Currently Amended) An LED operation light according to claim 1,  
~~characterized in that~~  
wherein at least one of the said measuring means (MM) has been arranged to measure intensities of the said emitted color components.

3. (Currently Amended) An LED operation light according to claim 1 ~~or 2,~~  
~~characterized in that~~  
wherein at least one set of the aforesaid measuring means (MM) has been arranged to measure temperature of the said LED components (LED).

4. (Currently Amended) An LED operation light according to claim 1, wherein ~~any one of the preceding claims, characterized in that~~  
the said measuring means (MM) comprise at least one measuring sensor (SE), which has been arranged to output the said measurement data as a measurement signal (MS), and the said control means (CM) comprise at least one processor (MP) or logic circuit, which has been arranged to produce the said control information as a control signal (CS).

5. (Currently Amended) An LED operation light according to claim 1, wherein ~~any one of the preceding claims, characterized in that~~  
the said LED component unit (LG) comprises a red (®), a green (G) and a blue (B) LED component.

6. (Currently Amended) An LED operation light according to claim 5,  
~~characterized in that~~  
wherein the light comprises at least two, e.g. three LED component units (LG), which units comprise a red (®), a green (G) and a blue (B) LED component (LED) arranged in a row, the said LED component units (LG) being arranged to form a row aligned with the said LED component row.

7. (Currently Amended) An LED operation light according to claim 1 ~~any one of the preceding claims, characterized in that~~  
wherein at least some of the said LED components are LED components (LED) emitting different shades of white (W).

8. (Currently Amended) An LED operation light according to claim 1, wherein ~~any one of the preceding claims, characterized in that~~ the LED components (LED) emitting each of the color components are connected functionally in parallel and/or electrically in series.

9. (Currently Amended) An LED operation light according to claim 1, any one of the preceding claims, characterized in that it comprises further comprising at least one adjustable power source (ADJ-PW) for each LED component color to be emitted, each adjustable power source (ADJ-PW) being arranged to supply power to LED components (LED) emitting a given color component.

10. (Currently Amended) An LED operation light according to claim 9, ~~characterized in that~~ the wherein said adjustable power sources (ADJ-PW) are integrated with the LED components (LED).

11. (Currently Amended) An LED operation light according to claim 1, wherein ~~any one of the preceding claims, characterized in that~~ the said LED component (LED) is a high power LED component whose average input power exceeds 500 mW.

12. (Currently Amended) An LED operation light according to claim 1, wherein ~~any one of the preceding claims, characterized in that~~ one of the said power sources (PW) is a constant-current source.

13. (Currently Amended) An LED operation light according to claim 6, wherein ~~any one of claims 6-12, characterized in that~~ the light comprises a collimator arrangement (CO) functionally connected to it and aligned with the row formed by the said LED component units (LG).

14. (Currently Amended) An LED operation light according to claim 13,  
~~characterized in that~~  
the wherein said collimator arrangement (CO) comprises collimators (CO) provided in the  
said LED component units (LG).

15. (Currently Amended) An LED operation light according to claim 1, wherein ~~any one of the  
preceding claims, characterized in that~~  
the angle (a) between the central rays of the light beams emitted by the outermost LED  
component units (LG) is at least 5 degrees.

16. (Currently Amended) An LED operation light according to claim 1, wherein ~~any one of the  
preceding claims, characterized in that~~  
the aforesaid at least two LED component units (LG) comprise LED components (LED)  
comprising a lens-reflector component LR (702), the aforesaid measuring means (MM), such as an  
RGB color sensor, being Integrated with the said lens-reflector LR (702) to measure the color  
component or components emitted from the LED component (LED) in question.

17. (Currently Amended) An LED operation light according to claim 1, further comprising:  
~~any one of the preceding claims, characterized in that~~  
it ~~comprises~~ LED components (LED) producing N different color components, N being an  
integer equal to or higher than two, and adjustable power sources (ADJ-PW) arranged for at least –1  
LED components (LED) producing different color components.

18. (Currently Amended) An LED operation light according to claim 17, further comprising:  
~~characterized in that~~  
it ~~comprises~~ N pieces adjustable power sources (ADJ-PW).

19. (Currently Amended) A method for controlling the color temperature of a LED operation light, in which method:

light emission comprising color components of at least two different wavelengths is produced in response to the power supplied by at least two power sources (PW), at least one of which is an adjustable power source (ADJ-PW), to a LED component unit (LG) comprising at least one LED component (LED), ~~characterized in that, in the said method~~ comprising the steps of:

measuring the color temperature of light produced by the LED component units (LG), being possibly reflected from some surface, or at least one magnitude generated by them and having a known correlation to the color temperature of the light produced by the LED component units (LG), ~~is measured~~, and

producing control information for at least one of the said adjustable power sources (ADJ-PW) ~~is produced~~ in response to measurement data obtained from the said measurement to control the production of at least one color component in at least one LED component (LED).

20. (Currently Amended) A method according to claim 18, ~~characterized in that~~ wherein

intensity of each emitted color component is measured, e.g. by measuring intensities of emissions of LED components producing red, green and blue color components by means of an RGB color sensor.

21. (Currently Amended) A method according to claim 19 ~~or 20~~, ~~characterized in that~~ wherein

temperature of the LED components (LED), especially temperature of a heat sink arranged to be shared by the said components is measured, and production of color components is controlled in a desired manner on the basis of characteristic temperature-emission correlation of each of the LED components used.

22. (Currently Amended) A method according to ~~any one of claims 19-21,~~  
~~characterized in that~~

~~claim 19, wherein~~ emission of at least one of the said color components is controlled by means of at least one adjustable power source by connecting at least some of the LED components (LED) producing the color component in question electrically in series, and this series to at least one of the said adjustable power sources, so that the production of that color component of light changes in response to the adjustment of the said at least one power source.

23. (Currently Amended) A method according to claim 19, wherein ~~any one of claims 19-22, characterized in that~~

LED components producing N different color components are used, N being an integer equal to or higher than two, and the production of at least N-1 color components is controlled.

24. (Currently Amended) A method according to claim 23,  
~~characterized in that~~

wherein the production of N color components is controlled.